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NOTICE OF ALLOWANCE AND FEE(S) DUE

7380 7590 05/23/2008

SMART & BIGGAR P.O. BOX 2999, STATION D 900-55 METCALFE STREET OTTAWA, ON KIP5Y6 CANADA EXAMINER
PICH, PONNOREAY

ART UNIT PAPER NUMBER

2135 DATE MAILED: 05/23/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892.490	06/28/2001	Robert Everett Parkhill	77666-10/ILO	3152

TITLE OF INVENTION: BULK CERTIFICATE LIFETIME ALLOCATION SYSTEMS, COMPONENTS AND METHODS

APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	NO	\$1440	\$0	\$0	\$1440	08/25/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT AGRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTOVSB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTOVSB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent attorney.	printing on the patent front page, list				
PLEASE NOTE: Unl recordation as set fort (A) NAME OF ASSIG	less an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee sletion of this form is NO	THE PATENT (print or typedata will appear on the pat a substitute for filing an and (B) RESIDENCE: (CITY inted on the patent):	atent. If an assigna assignment. and STATE OR C	OUNT	RY)		
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Issue Fee	are submitted.		A check is enclosed.	se m st reapply an	y pre-	lously paid issue fee	snown above)	
				☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any				
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5. Change in Entity Stat	tus (from status indicate s SMALL ENTITY state		☐ b. Applicant is no long	ger claiming SMAI	L EN	ITTY status. See 37 C	FR 1.27(g)(2).	
NOTE: The Issue Fee and interest as shown by the i	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than t Office.	ne applicant; a regi	stered.	attorney or agent; or the	e assignee or other	party in
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Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 755 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 755 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)			
09/892,490	PARKHILL ET AL.			
Examiner	Art Unit			
PONNOREAY PICH	2135			

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 2/14/08.
- The allowed claim(s) is/are 1,3-9,11,12,14-17 and 19-20.
- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. \(\sum \) Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No.
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. ☐ Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date ______.
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other _____.

Application/Control Number: 09/892,490

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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David Walters (Reg. #: 53,904) on 5/13/08. Mr. Walters had previously requested that the examiner call to discuss further amendments to overcome the prior art if, after further search and consideration, the examiner thought that the latest amendment was not sufficient for allowance. Upon further consideration of the amendment to the independent claims submitted on 12/21/07, the examiner thought that the language of amended subject matter would read on account maintenance fees such as those utilized by banks. It was discussed that further amending the independent claims such that the subtraction of additional time was done continuously would be different from the concept of account maintenance fees done by banks because bank maintenance fees are charged periodically, i.e. per month or per quarter. We also discussed some amendments to overcome some minor informalities to the claims. As per MPEP 713.04, a separate interview summary form is not provided since the substance of the interview has been summarized herein.

The application has been amended as follows:

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IN THE CLAIMS:

1. (Currently amended) A method of managing assertions comprising the steps of:

selling a pool of unallocated time available for assertions;

upon request, generating an assertion between a name and a public key, the assertion having a lifetime, during which the assertion is usable to provide an indication that the public key is associated with the name, and subtracting the lifetime from the unallocated time;

upon request, revoking an assertion and adding any remaining lifetime of the assertion to the unallocated time; and

eroding the unallocated time over time, by <u>continuously</u> subtracting additional time from the unallocated time independently of subtracting the lifetime of the assertion from the unallocated time, to thereby prevent the unallocated time from being maintained indefinitely.

3. (Currently amended) A computer implemented system for managing assertions between names and public keys, the system comprising:

a repository containing an unallocated time, the unallocated time indicating an amount of time available for assertions;

a client interface;

a purchase component operatively coupled to the client interface and to the repository, and adapted to add a bulk lifetime requested through the client interface to the unallocated time;

a request component operatively coupled to the client interface and to the repository, and adapted to, upon generation of an assertion between a name and a public key, the assertion having a lifetime requested through the client interface, deduct the requested lifetime from the unallocated time: and

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a revocation component operatively coupled to the client interface and to the repository and adapted to, upon revocation of an assertion having a remaining lifetime, add the remaining lifetime to the unallocated time.

wherein at least one of the repository, the client interface, the purchase component, the request component, and the revocation component comprises a hardware component, and wherein the unallocated time is eroded over time, by continuously deducting additional time from the unallocated time independently of the request component deducting the requested lifetime from the unallocated time, to thereby prevent the unallocated time from being maintained indefinitely.

7. (Currently amended) A processing platform implemented method comprising the computer implemented steps of:

maintaining an unallocated time, the unallocated time being time available for assertions between a name and a public key;

accepting a request for an assertion between a name and a public key and a requested lifetime during which the assertion is usable to provide an indication that the public key is associated with the name:

determining whether the unallocated time is greater than or equal to the requested lifetime; upon determining that the unallocated time is greater than or equal to the requested lifetime, deducting the requested lifetime from the unallocated time; and

eroding the unallocated time over time, by <u>continuously</u> deducting additional time from the unallocated time independently of deducting the requested lifetime from the unallocated time, to thereby prevent the unallocated time from being maintained indefinitely.

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11. (Currently amended) A processing platform implemented method comprising the computer

implemented steps of:

maintaining an unallocated time, the unallocated time being available for assertions, between a

name and a public key;

identifying, from a request for revocation, an assertion between a name and a public key to be revoked, the assertion having a remaining lifetime during which the assertion is usable to provide an

indication that the public key is associated with the name;

adding the remaining lifetime to the unallocated time; and

eroding the unallocated time over time, by <u>continuously</u> deducting time from the unallocated time independently of deducting a lifetime of an assertion from the unallocated time, to thereby

prevent the unallocated time from being maintained indefinitely.

14. (Currently amended) An article of manufacture comprising a computer-readable storage medium

containing instructions for:

generating an entry in a repository, the entry including an unallocated time available for

assertions;

receiving a request for a purchase of bulk lifetime;

adding the bulk lifetime to the unallocated time in the event that a request for a purchase of

bulk lifetime is received;

receiving a request for an assertion and a requested lifetime, the assertion being between a

name and a public key;

deducting the requested lifetime from the unallocated time in the event that a request for an

assertion is received;

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receiving an identification of an assertion to be revoked, the assertion to be revoked having a remaining lifetime:

adding the remaining lifetime to the unallocated time in the event that an identification of an assertion to be revoked is received; and

eroding the unallocated time over time, by <u>continuously</u> deducting additional time from the unallocated time independently of deducting the requested lifetime from the unallocated time, to thereby prevent the unallocated time from being maintained indefinitely.

15. (Currently amended) A computer implemented system for allocating assertions comprising: means for allocating a pool of unallocated time available for assertion validity;

a client interface;

means for processing a request received through the client interface for an assertion between a name an a public key, the assertion having a lifetime, the means for processing the request being operatively coupled to the client interface and to the means for allocating, and subtracting the lifetime from the pool of unallocated time:

means for processing a revocation of an existing assertion, the means for processing the revocation being operatively coupled to the means for allocating, and determining any remaining lifetime of the existing assertion and adding at least a portion of the remaining lifetime of the assertion to the <u>pool of unallocated time</u>; and

means for eroding the <u>pool of</u> unallocated time over time, the means for eroding the <u>pool of</u> unallocated time being operatively coupled to the means for allocating, and <u>continuously</u> subtracting additional time from the pool of unallocated time independently of the means for processing a request

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subtracting the lifetime from the <u>pool of</u> unallocated time, to thereby prevent the <u>pool of</u> unallocated time from being maintained indefinitely,

wherein at least one of the means for allocating, the client interface, the means for processing a request, the means for processing a revocation, and the means for eroding the unallocated time comprises a hardware component.

16. (Currently amended) The system of claim 15 further comprising;

means for monitoring when the <u>pool of</u> unallocated time falls below a threshold, and for notifying a user associated with the <u>pool of</u> unallocated time if the <u>pool of</u> unallocated time falls below the threshold.

17. (Currently amended) A computer readable medium having instructions stored thereon for execution on a processing platform to execute a method comprising:

selling a pool of unallocated time available for assertions;

upon request, generating an assertion between a name and a public key, the assertion having a lifetime, and subtracting the lifetime from the pool of unallocated time;

upon request, revoking an assertion and adding any remaining lifetime of the assertion to the pool of unallocated time; and

eroding the unallocated time over time, by <u>continuously</u> subtracting additional time from the unallocated time independently of subtracting the lifetime of the assertion from the <u>pool of</u> unallocated time, to thereby prevent the pool of unallocated time from being maintained indefinitely.

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The following is an examiner's statement of reasons for allowance: Independent claims 1, 3, 7, 11, 14, and 15 are allowed for the combination of limitations recited therein, but most especially because the prior art does not teach eroding the unallocated time over time, by continuously subtracting additional time from the unallocated time independently of subtracting the lifetime of the assertion from the unallocated time, to thereby prevent the unallocated time from being maintained indefinitely. Note that the closest prior art to this concept is account maintenance fees charged by banks. The difference from a functional point of view though is that bank maintenance fees are charged periodically, i.e. monthly or quarterly, whereas the claims allowed require continuous subtraction of the additional time, which means that the subtraction is done in real time and without interruption. The remaining claims are allowed due to dependency. It is further noted that the specification did not explicitly define what is meant by the terms computer readable medium and computer-readable storage medium. However, it is submitted that from the context of what is disclosed in the specification that one of ordinary skill in the art would have understood that these two mediums are meant to encompass tangible mediums, not signals.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PONNOREAY PICH whose telephone number is (571)272-7962. The examiner can normally be reached on 9:00am-4:30pm Mon-Thurs.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ponnoreay Pich/ Examiner, Art Unit 2135 /KIMYEN VU/ Supervisory Patent Examiner, Art Unit 2135